CLAIMS

1. Method of measuring the tilt of an optical disc (2) in an optical disc drive (1), said method comprising :

- a step of directing to the optical disc during a normal phase (T_{OFF}), a first laser beam (32) having a first optical characteristic for writing/reading information into/from the optical disc,
- a step of deriving a first intermediate value (RES(OFF)) from a first normalized error signal obtained after reflection of said first laser beam (32) on the optical disc,
- a step of directing to the optical disc during a tilt-measuring phase (T_{ON}), said first laser beam (32) and a second laser beam (42) having a second optical characteristic,
- a step of deriving a second intermediate value (RES(ON)) from a second normalized error signal obtained after reflection of said first and second laser beams (32, 42) on the optical disc,
- a calculation step of deriving a tilt-indicative signal (S_{TILT}) from the difference between said second and first intermediate values.

2. Method according to claim 1, wherein the first laser beam (32) has a first wavelength and wherein the second laser beam (42) has a second wavelength.

3. Method according to claim 2, wherein the second laser beam (42) has a focus point coinciding with a focus point of the first laser beam (32).

4. Method according to claim 1, wherein :

- the first laser beam (32) has a first focus point,
- the second laser beam (42) has a second focus point located at an axial distance from the first focus point.

5. Method according to claim 4, wherein the first laser beam (32) and the second laser beam (42) have the same wavelength.

6. Method according to claim 1, wherein :

- the first laser beam (32) has a first wavelength, and the second laser beam (42) has a second wavelength,
- the first laser beam (32) has a first focus point, and the second laser beam (42) has a second focus point located at an axial distance from the first focus point.

7. Method according to claim 1, wherein, in the tilt measuring phase (T_{ON}), the intensity of the second light beam (42) is intended to continuously rise from zero to a maximum value at approximately half-time (t0) of the tilt measuring phase (T_{ON}), and subsequently intended to continuously decrease from said maximum value to zero.

8. Method according to claim 1, wherein :

- the first intermediate value (RES(OFF)) is obtained shortly before the start (t1) or shortly after the end (t2) of the tilt measuring phase (T_{ON}),
- the second intermediate value (RES(ON)) is obtained within the tilt measuring phase (T_{ON}).

9. Method according to claim 1, wherein :

- the first intermediate value (RES(OFF)) is derived from the average of a first measure obtained shortly before the start (t1) of the tilt measuring phase (T_{ON}), and a second measure obtained shortly after the end (t2) of the tilt measuring phase (T_{ON}),
- the second intermediate value (RES(ON)) is obtained within the tilt measuring phase (T_{ON}).

10. Method according to claim 8 or 9, wherein the second intermediate value (RES(ON)) is obtained from a measure obtained at a central time (t0) within the tilt measuring phase (T_{ON}).

11. Method according to anyone of claims 1 to 10, further comprising a step of freezing, during the tilt measuring phase (T_{ON}), the actuation of at least one lens actuator of the optical disc drive (1).

12. Optical disc drive (1) for writing/reading information into/from an optical disc (2), said optical disc drive (1) comprising means for measuring the tilt of said optical disc (2), said means comprising :

- first means for generating and directing to the optical disc during a normal phase (T_{OFF}), a first laser beam (32) having a first optical characteristic for writing/reading information into/from the optical disc,
- calculation means (90) for deriving a first intermediate value (RES(OFF)) from a first normalized error signal obtained after reflection of said first laser beam (32) on the optical disc,
- second means for generating and directing to the optical disc during a tilt-measuring phase (T_{ON}), said first laser beam (32) and a second laser beam (42) having a second optical characteristic,
- calculation means (90) for deriving a second intermediate value (RES(ON)) from a second normalized error signal obtained after reflection of said first and second laser beams (32, 42) on the optical disc,
- calculation means (90) for deriving a tilt-indicative signal (S_{TILT}) from the difference between said second and first intermediate values.

13. Optical disc drive according to claim 12, wherein the first laser beam (32) has a first wavelength and wherein the second laser beam (42) has a second wavelength.

14. Optical disc drive according to claim 13, wherein the second laser beam (42) has a focus point coinciding with a focus point of the first laser beam (32).

15. Optical disc drive according to claim 12, wherein :

- the first laser beam (32) has a first focus point,
- the second laser beam (42) has a second focus point located at an axial distance from the first focus point.

16. Optical disc drive according to claim 15, wherein the first laser beam (32) and the second laser beam (42) have the same wavelength.

17. Optical disc drive according to claim 12, wherein :

- the first laser beam (32) has a first wavelength and wherein the second laser beam (42) has a second wavelength,
- the first laser beam (32) has a first focus point and wherein the second laser beam (42) has a second focus point located at an axial distance from the first focus point.

18. Optical disc drive according to claim 12, further comprising :

- an objective lens (34),
- lens actuators (51, 52, 53) for positioning the objective lens (34),
- means for freezing, during the tilt measuring phase (T_{ON}), the actuation of at least one lens actuator (51, 52, 53).

19. Optical disc drive according to anyone of claims 12 to 18, intended to handle one disc type (for example CD or DVD or Blu-Ray) only, wherein the second light generating device (41) is an auxiliary light source.

20. Optical disc drive according to anyone of claims 12 to 18, intended to handle at least two different disc types (for example : CD, DVD, Blu-Ray), wherein :

- the first means for generating and directing are adapted to generate the first light beam (32) suitable for handling a first one of said disc types,
- the second means for generating and directing are adapted to generate the second light beam (42) suitable for handling a second one of said disc types.